

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JUN 3 0 2010

REPLY TO THE ATTENTION OF:

(AE-17J)

CERTIFIED MAIL RETURN RECEIPT REQUESTED

J. Donald Loubiere Plant Manager Degussa Engineered Carbons, LP 11135 State Route 7 Belpre, Ohio 45714-9496

Dear Mr. Loubiere:

This is to advise you that the U.S. Environmental Protection Agency (EPA) has determined that the Degussa Engineered Carbons, LP, facility at 11135 State Route 7, Belpre, Ohio (Degussa) is in violation of the Clean Air Act (CAA) and associated state or local pollution control requirements. A discussion of the requirements violated is provided below. A Notice of Violation and Finding of Violation (NOV/FOV) for these violations is being issued and is enclosed for your review.

The CAA requires the development of Primary and Secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. To attain and maintain these standards, each State is required to develop an implementation plan. Ohio's State Implementation Plan (Ohio SIP), and federal regulations at 40 CFR 52.21 and 52.24, include the following requirements:

- 1) No person shall commence construction or modification of any air pollution source without first applying for and obtaining a Permit-to-Install from the commissioner of the Ohio Environmental Protection Agency.
- 2) An owner or operator may not begin construction or operation of a major modification at a major stationary source in an area that meets the NAAQS without first obtaining a construction permit that contains an emission limit that represents the best available control technology.
- 3) An owner or operator may not begin construction or operation of a major modification at a major stationary source in an area that does not meet the NAAQS without installing the lowest achievable emission rate for reducing the emissions of the pollutant for which the modification is major.

EPA finds that Degussa has violated the Ohio SIP and Parts C and D of the CAA, as detailed in this NOV/FOV.

Since Degussa's facility is subject to applicable requirements under the Ohio SIP that are not listed in its Title V permit, it has also violated Title V of the CAA and its associated regulations which require all CAA requirements applicable to a source to be incorporated into that source's Title V permit.

Section 113 of the CAA gives EPA several enforcement options to resolve these violations, including: issuing an administrative compliance order; issuing an administrative penalty order; bringing a judicial civil action; and bringing a judicial criminal action.

Section 113 of the CAA provides you with the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you with an opportunity to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Kushal Som. You may call him at (312) 353-5792, if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Degussa's compliance with the requirements of the Clean Air Act.

Sincerely,

Cheryl L. Newton

Director

Air and Radiation Division

Enclosure

cc: Robert Hodanbosi, Chief

Division of Air Pollution Control

Ohio Environmental Protection Agency

Bruce Weinberg APC Supervisor Ohio Environmental Protection Agency Southeast District Office

standard bcc's: official file copy w/attachment(s)
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William Wagner, C-13J other bcc's:

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Legend:	ARD:AECAB:AECAS(IL/IN):K. Som

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Degussa Engineered Carbons, LP) NOTICE OF VIOLATION and
Belpre, Ohio) FINDING OF VIOLATION
) EPA-05-10-OH-04
)
Proceedings Pursuant to)
the Clean Air Act,)
42 U.S.C. §§ 7401 et seq.	,

NOTICE AND FINDING OF VIOLATION

Degussa Engineered Carbons, LP (Degussa or you) owns and operates a carbon black facility at 11135 State Route 7, Belpre, Ohio. The facility consists of a number of pieces of equipment that generate air pollution and are subject to provisions of the Clean Air Act (the Act or CAA). This facility currently operates four units, including air pre-heaters, reactors, dryers and various other handling facilities/emissions units.

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV or Notice) to notify you of several items regarding the Belpre, Ohio facility. We find that you constructed a major modification causing a significant increase in nitrogen oxides (NO_X), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter less than 10 microns (PM₁₀), Total Suspended Particles (TSP), hydrogen sulfide (H₂S), Total Reduced Sulfur (TRS) and volatile organic compounds (VOC) emissions at a major stationary source in an area that was designated as attainment for ozone, SO₂, PM₁₀, and nitrogen dioxide (NO₂), and as non-attainment for TSP, at the time of the modifications, without first obtaining a construction permit meeting the Prevention of Significant Deterioration (PSD) or New Source Review (NNSR) requirements in Parts C and D of the CAA, the underlying federal regulations, and the Ohio State Implementation Plan (SIP). We find that you have also failed to comply with Title V requirements by not incorporating all applicable regulations into your Title V operating permit. These violations constitute violations of the Clean Air Act.

Section 113 of the Act provides you with the opportunity to request a conference with us to discuss the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

Statutory and Regulatory Background

Prevention of Significant Deterioration

- 1. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the CAA, 42 U.S.C. §§ 7470-7492, and their implementing regulations at 40 C.F.R. § 52.21 (collectively, "the PSD program"), establish specific pre-construction requirements applicable to the construction and modification of "major emitting facilities" located in areas designated as either attainment or unclassifiable for purposes of meeting the National Ambient Air Quality Standards.
- 2. The PSD Program prohibits, among other things, a "major emitting facility" from constructing a "major modification" unless it has obtained a pre-construction PSD permit that applies "Best Available Control Technology" (BACT) to control emissions from the proposed modified emissions unit, and conducts an analysis to determine the air quality impacts of the modification. Sections 165(a) of the Act, and 40 C.F.R. § 52.21(i).
- 3. Sections 110(a) and 161 of the CAA require each state to adopt a SIP containing regulations implementing the PSD Program.
- 4. A state may comply with Sections 110(a) and 161 of the CAA by having its own PSD regulations approved by EPA as part of its SIP, provided that the state PSD regulations are at least as stringent as those set forth at 40 C.F.R. § 51.166.
- 5. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP.
- 6. U.S. EPA delegated the authority to implement the federal PSD regulations to the State of Ohio by letter dated May 1, 1980. The federal PSD regulations were incorporated into the Ohio SIP on January 29, 1981. 40 C.F.R. § 52.1884 and 46 Fed. Reg. 9580 (January 29, 1981).
- 7. On October 10, 2001, U.S. EPA conditionally approved the Ohio SIP for PSD provisions for attainment areas. 66 Fed. Reg. 51570. On January 22, 2003, U.S. EPA approved the remaining portions Ohio's PSD provisions. 68 Fed. Reg. 2909. Ohio's PSD program is located in Ohio Administrative Code (OAC) 3745-31-01 through 3745-31-20. These rules mirror the federal PSD regulations codified in 40 C.F.R. in the 1999 edition of the Code of Federal Regulations. Citations in this NOV/FOV provide, as appropriate, both federal and State SIP citations. Note that the general provisions found at OAC 3745-31-01 to 3745-31-10 apply to both attainment and non-attainment areas.
- 8. Facilities in Ohio were required to comply with the delegated federal PSD program prior to October 10, 2001. Facilities in Ohio are required to comply with the approved Ohio PSD program on and after October 10, 2001.

- 9. On February 25, 2010, EPA partially approved revisions to Ohio's PSD and non-attainment NSR (NNSR) construction permit programs to address "NSR Reform" regulations promulgated on December 31, 2002. 67 Fed. Reg. 80186. The revisions to the Ohio SIP became effective on March 29, 2010. For purposes of the SIP, the applicable regulations are those regulations that were in effect during the time period when a source should have applied for and obtained a construction permit. The physical and operational changes identified in this NOV/FOV were made prior to the effective date of NSR Reform amendments to the Ohio SIP.
- 10. The PSD regulations set forth in 40 C.F.R. § 52.21 apply to any "major stationary source" that intends to construct a "major modification in an attainment or unclassifiable area." 40 C.F.R. § 52.21(i)(2).
- 11. For purposes of attainment areas, 40 C.F.R. 52.21(b) (1) (i) (a) (1999) and OAC 3745-31-01 (SS)(2)(xvi), define "major stationary source" as any stationary source within one of 28 source categories which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act. Carbon black plants (furnace process) are included among the 28 source categories.
- 12. 40 C.F.R. 52.21(b) (2) (i) (1999) and OAC 3745-31-01 (RR) define "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a "significant net emissions increase" of any pollutant subject to regulation under the Act.
- 13. 40 C.F.R. 52.21(b) (3) (i) (1999) and OAC 3745-31-01 (YY) define "net emissions increase" as the amount by which the sum of the following exceeds zero:
 - (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
 - (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- 14. 40 C.F.R. 52.21(b) (21)(iv) (1999) and OAC 3745-31-01(B)(3) define "actual emissions" and state that for any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit (PTE) of the unit on that date.
- 40 C.F.R. 52.21(b) (23)(i) (1999) and OAC 3745-31-01 (SSS) define "significant" in reference to a "net emissions increase" of the following air pollutants, NO_X, SO₂, PM, carbon monoxide (CO), hydrogen sulfide (H₂S), and Total Reduced Sulfur (TRS) as: an emissions rate that would equal or exceed 40 tons or more per year of NO_X, 40 tons or more per year of SO₂, 25 tons or more per year of PM, 100 tons or more per year of CO, 10 tons or more per year of H₂S, and 10 tons or more per year of TRS.
- 16. "Best available control technology" means an emission limitation reflecting the maximum degree of reduction of each regulated PSD pollutant which the permitting

- authority determines is achievable for a facility on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs. Section 169(3) of the Act; OAC 3745-31-01(M).
- 17. To construct a "major modification" in an attainment area, a "major stationary source" must, among other things, obtain a PSD permit, install and operate BACT control devices for each regulated PSD pollutant for which the medication would result in a significant net emissions increase, and conduct an analysis to determine the air quality impacts of the proposed modification. 40 C.F.R. §§ 52.21(i), (j) and (k); OAC 3745-31-15.
- 18. Pursuant to 40 C.F.R. § 52.21(i)(1), and OAC 3745-31-13(A), no major stationary source shall begin actual construction of a major modification without a valid PSD permit.
- 19. An applicant for a permit to modify a stationary source is required to submit all information necessary to allow the permitting authority to perform any analysis or make any determination required in order to issue the appropriate permit. 40 C.F.R. 52.21(n) (1999). See also, OAC 3745-31-05(E)(1) and OAC 3745-31-12(B).
- 20. Any owner or operator of a source subject to 40 C.F.R. 52.21(1999) who commences construction or modification after the effective date of the PSD regulations without applying for and receiving a valid PSD permit, shall be subject to appropriate enforcement action. 40 C.F.R. §§ 52.21(r) (1), 52.23(r) (1999), and Section 113 of the CAA.

Non-Attainment New Source Review

- 21. The Non-attainment New Source Review (NNSR) provisions of Part D of the Act, §§ 171-193, 42 U.S.C. §§ 7501-7515, require preconstruction review and permitting for modifications of stationary sources located in non-attainment areas. Pursuant to applicable regulations, if a major stationary source located in a non-attainment area is planning to make a major modification, then that source must obtain a NNSR permit before beginning actual construction. To obtain this permit, the source must, among other things, comply with the Lowest Achievable Emission Rate (LAER) and provide offsetting emission reductions. CAA § 173, 42 U.S.C. § 7503.
- 22. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to submit to U.S. EPA a plan for the implementation, maintenance and enforcement of the NAAQS, including a permit program as required by Part D of the CAA. On July 23, 1980, and September 25, 1980, OEPA submitted its NNSR plan designed to meet the non-attainment area requirements of Title I, Part D of the CAA. U.S. EPA conditionally approved this plan on October 31, 1980. 45 Fed. Reg. 72119 (codification corrected on December 17, 1980, at 45 Fed. Reg. 82927).
- 23. To satisfy the conditional approval, OEPA submitted a request to incorporate 40 C.F.R. Part 51, Appendix S, as the Ohio NNSR plan. U.S. EPA granted limited approval of the revised regulations on September 8, 1993. 58 Fed. Reg. 47214.

- 24. On January 10, 2003, EPA fully approved the Ohio's NNSR SIP rules (Ohio Administrative Code 3745-31-21 through 3745-31-27). 68 Fed. Reg. 1366.
- 25. Ohio SIP Rule OAC 3745-31-01(SS)(1) defines "major stationary source" in non-attainment areas as any stationary source of air pollutants that emits, or has the potential to emit 100 tons per year or more of any air pollutant subject to regulation under the Clean Air Act.
- 26. Ohio SIP Rule OAC 3745-31-22(A)(1) requires that permits allowing major modifications at major stationary sources in non-attainment areas include an emission limit that is the LAER for such a stationary source. Ohio SIP Rule OAC 3745-31-01(OO)(1) and (2) define "LAER" as the more stringent of the following two options:
 - The most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
 - The most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source.
- 27. Ohio SIP Rule OAC 3745-31-22(A)(2) also requires an owner or operator applying for a permit for a major modification to a major stationary source in a non-attainment area to certify that all other existing major stationary sources that it owns or operates in Ohio are in compliance with all applicable emission limitations and standards under the CAA or with a federally enforceable or court decreed compliance schedule.
- 28. Ohio SIP Rule OAC 3745-31-22(A)(3) requires an owner or operator applying for a permit for a major modification to a major stationary source in a non-attainment area to offset the increased emissions by reducing emissions from existing air contaminant sources in the same area.
- 29. Ohio SIP Rule OAC 3745-31-21(A) prohibits owners or operators of major stationary sources from beginning construction of a major modification without first meeting the non-attainment NSR requirements in Ohio SIP Rules OAC 3745-31-21 through 3745-31-27.
- 30. Any owner or operator of a source subject to the NNSR provisions of Part D of the Act, and the underlying federal and Ohio SIP provisions, who commences construction or modification after the effective date of those regulations without applying for and

receiving a NNSR permit, shall be subject to appropriate enforcement action. Section 113 of the CAA.

Requirements for SIP Permits to Install

- 31. OAC 3745-31-02(A) states that no person shall cause, permit, or allow the installation of a new source of air pollutants or allow the modification of an air containment source without first obtaining a permit to install from the director.
- OAC 3745-31-05 provides that the director shall issue a permit to install if he determines that, among other things, the modification will not result in a violation of applicable laws. OAC 3745-31-01(F) defines "applicable laws" to include the Act and applicable federal regulations thereunder, and the Ohio SIP, including OAC 3745-31-13(A) and OAC 3745-31-21(A).

Requirements for Title V Operating Permits

- 33. Section 502(a) of the CAA, 42 U.S.C. 7661a(a), and 40 C.F.R. 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.
- 34. 40 C.F.R. 70.1(b) provides that all sources subject to the Part 70 regulations shall have a permit to operate that assures compliance by the source with all applicable requirements.
- 35. 40 C.F.R. 70.7(b) provides that no source subject to Part 70 requirements may operate without a permit issued under a Part 70 program.
- 36. U.S. EPA fully approved the Ohio Title V program, effective October 1, 1995. 60 Fed. Reg. 42045 (August 15, 1995). Ohio's Title V permit requirements are codified at OAC 3745-77.
- 37. OAC 3745-77-02(A) prohibits operation of a source subject to Title V permitting requirements without a permit issued under Chapter 3745-77. OAC 3745-77-02(A) (1) requires that each Title V permit shall include emission limits and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance.

Factual Background

The Degussa Carbon Black Facility

38. Degussa owns and operates a carbon black facility located at 11135 State Route 7, Belpre, Washington County, Ohio. The facility operates four carbon black plants (identified as Units 1-4).

- 39. The four carbon black plants located at the Degussa carbon black facility are process black plants (furnace process) included within the source categories listed at 40 C.F.R. § 52.21(b)(1)(i)(a) and OAC 3745-31-01(SS)(2)(xvi).
- 40. The Degussa carbon black facility emits, or has the potential to emit, among other things, at least 100 tons of each of the following pollutants: CO, SO2, NO_X, PM₁₀, TSP, TRS, and H2S, and VOC. The Degussa facility is a major stationary source under the Act.

Air Quality Control Region

- Washington County, Ohio, is the Ohio portion of the Parkersburg-Marietta OH-WV AQCR.
- 42. For the criteria pollutant SO₂, from 1985 to date, Washington County has been designated as "better than national standards." 40 C.F.R. § 81.336 (1985-2009); see also, 59 Fed. Reg. 48405 (Sept. 21, 1994).
- 43. For the criteria pollutant CO, from 1985 to date, Washington County has been designated either as "cannot be classified or better than national standards" or as "unclassifiable/attainment." 40 C.F.R. § 81.336 (1985-2009); see also, 56 Fed. Reg. 56811 (Nov. 6, 1991).
- 44. For the criteria pollutant ozone, from 1985 to 1997, Washington County was designated either as "cannot be classified or better than national standards" or as "unclassifiable/attainment." 40 C.F.R. § 81.336 (1985-1998); see also, 56 Fed. Reg. 56811 (Nov. 6, 1991), 57 Fed. Reg. 56773 (Nov. 30, 1992). For ozone (1 hour standard), from 1998 to date, Washington County has been designated either as "not applicable" or as "unclassifiable/attainment." 40 C.F.R. § 81.336 (1999-2009); see also, 63 Fed. Reg. 31071 (June 5, 1998), 65 Fed. Reg. 45251(July 20, 2000), 70 Fed. Reg. 44477 (August 3, 2005). For ozone (8 hour standard), from June 15, 2004, to June 15, 2007, Washington County was designated as "nonattainment, subpart 1." 40 C.F.R. § 81.336 (2004-2007); see also, 69 Fed. Reg. 23926 (April 30, 2004), 72 Fed. Reg. 27654 (May 16, 2007). For ozone (8 hour standard), from June 16, 2007 to date, Washington County has been designated as "attainment." 40 C.F.R. § 81.336 (2007-2009); see also, 72 Fed. Reg. 27654 (May 16, 2007).
- 45. For the criteria pollutant NO₂, from 1985 to date, Washington County has been designated as "cannot be classified or better than national standards." 40 C.F.R. § 81.336 (1985-2009).
- 46. For the criteria pollutant Total Suspended Particles (TSP), from 1985 to June 15, 1989, Washington County was designated as "does not meet secondary standards." 40 C.F.R. § 81.336 (1985-1989); see also, 54 Fed. Reg. 21219 (May 17, 1989). For TSP, from June 16, 1989 to June 3, 1994, Washington County was designated as "better than national standards." 40 C.F.R. § 81.336 (1989-1994); see also, 54 Fed. Reg. 21219 (May 17,

1989), 59 Fed. Reg. 28482 (June 2, 1994). For PM-10, from 1992 to date, Washington County either was not designated as "an initial nonattainment area," or has been designated as "unclassifiable." 40 C.F.R. § 81.336 (2002-2009); see also, 56 Fed. Reg. 56811 (Jan. 6, 1992), 57 Fed. Reg. 56773 (Nov. 30, 1992). For PM-2.5, from April 5, 2005, to December 14, 2009, Washington County was designated as "nonattainment." 40 C.F.R. § 81.336 (2005-2009); see also, 70 Fed. Reg. 995 (Jan. 5, 2005), 74 Fed. Reg. 58754 (Nov. 13, 2009). By Federal Register notice dated November 13, 2009, PM-2.5 was amended to a 24-hour NAAQS, and Washington County was re-designated to attainment. 74 Fed. Reg. 58754 (Nov. 13, 2009).

Physical and Operational Changes to Unit 1

Air Preheater

- During or about May 1987, Degussa made physical and operational changes to Unit 1, including, but not limited to, installing an air preheater, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, CO, VOC, NO_X, H₂S, TRS, and SO₂.
- 48. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Sections 165 and 173 of the Act, including, but not limited to, compliance with BACT and LAER, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Dryer Exhaust Fan

- 49. During or about October 1, 1989, through November 31, 1989, Degussa made physical and operational changes to Unit 1, including, but not limited to, installing a new dryer exhaust fan, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, H₂S, TRS, CO, VOC, and SO₂.
- 50. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Oxygen Enrichment

- During or about August 15, 1990, through November 1, 1990, Degussa made physical and operational changes to Unit 1, including, but not limited to, installing an oxygen enrichment system, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, CO, NO_X, VOC, H₂S, TRS, and SO₂.
- 52. For the physical and operational changes described above, Degussa has neither applied

for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Air Manifold, Reactor 3

- During or about March 1, 1993, through June 30, 1993, Degussa made physical and operational changes to Unit 1, including, but not limited to, installing a new manifold on Reactor 3, which resulted in a significant net emissions increase, as defined OAC 3745-31-01(SSS), of TSP, CO, NO_X, VOC, H₂S, TRS, and SO₂.
- 54. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Air Preheater and PAD Reactors

- During or about February 1, 1994, through March 31, 1994, Degussa made physical and operational changes to Unit 1, including, but not limited to, replacing two of the four existing air rate reactors with PAD reactors with 750° air preheaters, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM₁₀, TSP, H2S, TRS, VOC, and SO₂.
- 56. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Air Blowers

- During or about February 1, 1994, through March 31, 1994, Degussa made physical and operational changes to Unit 1, including, but not limited to, replacing two air blowers, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, H₂S, TRS, PM₁₀, VOC, and SO₂.
- 58. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Fourth Compartment to Secondary Bag Filter

59. During or about February 28, 1995, through May 12, 1995, Degussa made physical and operational changes to Unit 1, including, but not limited to, the installation of a 4th

- compartment to the Secondary Bag Filter, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM_{10} , NO_X , VOC, CO, H_2S , TRS, and SO_2 .
- 60. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Increase NO_x Limit

- On or about October 24, 2004, Degussa made operational changes to Unit 1, when Degussa applied for, and Ohio EPA issued, a Permit to Install to increase (relax) the allowable NO_X emission limit on the Unit 1 and Unit 2 dryers, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of CO, NO_X, and SO₂.
- 62. For the operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Process Bag Filter Upgrade

- During or about July 1, 2006, through July 31, 2006, Degussa made physical and operational changes to Unit 1, including, but not limited to, a process bag filter upgrade, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of CO and SO₂.
- 64. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Physical and Operational Changes to Unit 2

Third Tread Reactor

- During or about December 15, 1986, through February 1, 1987, Degussa made physical and operational changes to Unit 2, including, but not limited to, the installation of a Third Tread Reactor, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, CO, NO_X, VOC, TRS, H₂S, and SO₂.
- 66. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Sections 165 and 173 of

the Act, including, but not limited to, compliance with BACT and LAER, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-2(A).

Reactor 2 Air Preheater

- During or about October 1, 1989, through December 31, 1989, Degussa made physical and operational changes to Unit 2, including, but not limited to, the installation of a 1600°F air preheater at reactor 2, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, CO, NO_X, VOC, H₂S, TRS, and SO₂.
- 68. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Reactors 3 and 4 Air Preheaters

- 69. During or about October 1, 1989, through December 31, 1989, Degussa made physical and operational changes to Unit 2, including, but not limited to, the installation of air preheaters at reactors 3 and 4, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, CO, NO_X, VOC, H₂S, TRS, and SO₂.
- 70. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Oxygen Enrichment

- 71. During or about August 15, 1990, through November 1, 1990, Degussa made physical and operational changes to Unit 2, including, but not limited to, installing an oxygen enrichment system, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of TSP, TRS, H2S, CO, NO_X, VOC, and SO₂.
- 72. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Dryer Exhaust Fan

73. During or about December 12, 1990, through December 14, 1990, Degussa made physical and operational changes to Unit 2, including, but not limited to, the installation of a dryer exhaust fan, which resulted in a significant net emissions increase, as defined

- at OAC 3745-31-01(SSS), of TSP, H2S, TRS, CO, NOX, VOC, and SO2.
- 74. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Conversion to Increase Production for Industrial Rubber Goods Market

- 75. During or about October 1, 1995, through November 30, 1995, Degussa made physical and operational changes to Unit 2, including, but not limited to, installing various equipment to increase the market share of carbon black sold to the Industrial Rubber Goods market, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM₁₀, CO, and SO₂.
- 76. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Reactor 3 Air Manifold

- 77. During or about January 15, 1996, through March 1, 1996, Degussa made physical and operational changes to Unit 2, including, but not limited to, installing a new air manifold on reactor 3, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM₁₀, CO, NO_X, and SO₂.
- 78. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Increase NO_X Limit

- On or about October 24, 2004, Degussa made operational changes to Unit 2, when Degussa applied for, and Ohio EPA issued, a Permit to Install to increase (relax) the allowable NO_X emission limit on the Unit 1 and Unit 2 dryers, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of CO, NO_X, and SO₂.
- 80. For the operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Reactor 2 Air Preheater

- During or about October 15, 2007, through November 15, 2007, Degussa made physical and operational changes to Unit 2, including, but not limited to, installing a new air preheater on reactor 2, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of SO₂.
- 82. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Physical and Operational Changes to Unit 3

Increase NO_X Limit

- On or about October 24, 1997, Ohio EPA issued a Permit to Install to Degussa to modify Units 1, 2, and 3, install a new Unit 4 and a flare stack for combustion of tail-gas emissions from Units 1 and 2, and raised the NO_X allowable emission limit; subsequently, Degussa made physical and operational changes to, among other Units, Unit 3, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of NO_X, and SO₂ at Unit 3.
- 84. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Physical and Operational Changes to Unit 4

Grit Separator

- During or about November 1, 2003, through December 31, 2003, Degussa made physical and operational changes to Unit 2, including, but not limited to, installing a grit separator, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of SO₂.
- 86. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Increases in Feedstock Oil Sulfur Limits

PTI to Increase Feedstock Oil Sulfur Limit from 2% to 3%

- 87. On or about August 21, 2003, Ohio EPA issued a Permit to Install to Degussa to increase (or relax) the feedstock oil sulfur limit from 2% to 3%, with the same existing permitted allowable emission rate, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM₁₀, CO, NO_X, SO₂, and VOC.
- 88. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, valid construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

PTI to Increase Feedstock Oil Sulfur Limit from 3% to 4%

- 89. On or about November 29, 2007, Ohio EPA issued a Permit to Install to Degussa to increase (or relax) the feedstock oil sulfur limit from 3% to 4%, with the same existing permitted allowable emission rate, which resulted in a significant net emissions increase, as defined at OAC 3745-31-01(SSS), of PM₁₀, CO, NO_X, and SO₂.
- 90. For the physical and operational changes described above, Degussa has neither applied for, nor obtained, construction permits issued in accordance with Section 165 of the Act, including, but not limited to, compliance with BACT, and the underlying federal and state regulations, including, but not limited to, OAC 3745-31-02(A).

Violations

Violations at Unit 1

Air Preheater

- 91. The physical and operational changes made to Unit1 referenced in Paragraph 47 constitute a major modification to a major stationary source in an area designated as attainment for CO, ozone, SO₂, NO₂, and non-attainment for TSP.
- 92. Degussa's failure to apply for and obtain a construction permit in accordance with Sections 165 and 173 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT and LAER, constitute continuing violations of, among other provisions, Sections 165 and 173 of the Act, the underlying federal regulations, and OAC 3745-31-13(A), OAC 3745-31-21(A), and OAC 3745-31-02(A).

Dryer Exhaust Fan

- 93. The physical and operational changes made to Unit1 referenced in Paragraph 49 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, TSP, and CO.
- 94. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Oxygen Enrichment

- 95. The physical and operational changes made to Unit1 referenced in Paragraph 51 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, TSP, CO, and NO₂.
- 96. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Air Manifold, Reactor 3

- 97. The physical and operational changes made to Unit 1 referenced in Paragraph 53 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, PM₁₀, NO₂, CO, and TSP.
- 98. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Air Preheater and PAD Reactors

- 99. The physical and operational changes made to Unit1 referenced in Paragraph 55 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, PM₁₀, and TSP.
- 100. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions,

Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Air Blowers

- 101. The physical and operational changes made to Unit 1 referenced in Paragraph 57 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, PM₁₀, and TSP.
- 102. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Fourth Compartment to Secondary Bag Filter

- 103. The physical and operational changes made to Unit1 referenced in Paragraph 59 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, PM₁₀, NO₂, and CO.
- 104. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Increase NOx Limit

- 105. The physical and operational changes made to Unit1 referenced in Paragraph 61 constitute a major modification to a major stationary source in an area designated as attainment for SO₂, CO, and NO₂.
- 106. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Process Bag Filter Upgrade

107. The physical and operational changes made to Unit1 referenced in Paragraph 63 constitute a major modification to a major stationary source in an area designated as attainment for SO₂, and CO.

108. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Violations at Unit 2

Third Tread Reactor

- 109. The physical and operational changes made to Unit 2 referenced in Paragraph 65 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, CO, and NO₂, and non-attainment for TSP.
- 110. Degussa's failure to apply for and obtain a construction permit in accordance with Sections 165 and 173 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT and LAER, constitute continuing violations of, among other provisions, Sections 165 and 173 of the Act, the underlying federal regulations, and OAC 3745-31-13(A), OAC 3745-31-21(A), and OAC 3745-31-02(A).

Reactor 2 Air Preheater

- 111. The physical and operational changes made to Unit 2 referenced in Paragraph 67 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, TSP, CO, and NO₂.
- 112. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Reactors 3 and 4 Air Preheaters

- 113. The physical and operational changes made to Unit 2 referenced in Paragraph 71 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, TSP, CO, and NO₂.
- 114. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Oxygen Enrichment

- 115. The physical and operational changes made to Unit 2 referenced in Paragraph 71 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, TSP, CO and NO₂.
- 116. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Dryer Exhaust Fan

- 117. The physical and operational changes made to Unit 2 referenced in Paragraph 73 constitute a major modification to a major stationary source in an area designated as attainment for ozone, SO₂, PM₁₀, NO₂.
- 118. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Conversion to Increase Production for Industrial Rubber Goods Market

- 119. The physical and operational changes made to Unit 2 referenced in Paragraph 75 constitute a major modification to a major stationary source in an area designated as attainment for SO₂, CO, and PM₁₀.
- 120. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Reactor 3 Air Manifold

- 121. The physical and operational changes made to Unit 2 referenced in Paragraph 77 constitute a major modification to a major stationary source in an area designated as attainment for CO, SO₂, PM₁₀, and NO₂.
- 122. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions,

Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Increase NO_X Limit

- 123. The physical and operational changes made to Unit 2 referenced in Paragraph 79 constitute a major modification to a major stationary source in an area designated as attainment for SO₂, CO, and NO₂.
- 124. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Reactor 2 Air Preheater

- 125. The physical and operational changes made to Unit 2 referenced in Paragraph 81 constitute a major modification to a major stationary source in an area designated as attainment for SO₂.
- Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Violations at Unit 3

Increase NOx Limit

- 127. The physical and operational changes made to Unit 3 referenced in Paragraph 85 constitute a major modification to a major stationary source in an area designated as attainment for SO₂ and NO₂.
- 128. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Violations at Unit 4

Grit Separator

- 129. The physical and operational changes made to Unit 4 referenced in Paragraph 85 constitute a major modification to a major stationary source in an area designated as attainment for SO₂.
- 130. Degussa's failure to apply for and obtain a construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Increases in Feedstock Oil Sulfur Limits

PTI to Increase Feedstock Oil Sulfur Limit from 2% to 3%

- 131. The physical and operational changes made by Degussa referenced in Paragraph 87 constitute a major modification to a major stationary source in an area designated as attainment for PM₁₀, ozone, CO, NO₂, and SO₂.
- 132. Degussa's failure to apply for and obtain a valid construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

PTI to Increase Feedstock Oil Sulfur Limit from 3% to 4%

- 133. The physical and operational changes made by Degussa referenced in Paragraph 89 constitute a major modification to a major stationary source in an area designated as attainment for PM10, CO, NO₂, and SO₂.
- 134. Degussa's failure to apply for and obtain a valid construction permit in accordance with Section 165 of the Act, the underlying federal regulations, and the Ohio SIP, including its failure to implement BACT, constitute continuing violations of, among other provisions, Section 165 of the Act, the underlying federal regulations, and OAC 3745-31-13(A) and OAC 3745-31-02(A).

Title V

135. Degussa continuously violates Title V permitting requirements at Section 503 of the CAA and 40 C.F.R. Part 70, because it has yet to submit a complete application for a Title V operating permit for the Facility that identifies all applicable requirements, that

accurately certifies compliance with such requirements, and that contains a compliance plan for all applicable requirements for which it is not in compliance.

Environmental Impact of Violations

- 136. Excess emissions of NO_X increase ground level concentrations of ozone and nitrogen dioxide, both of which can cause respiratory inflammation, increased difficulty breathing, and lung damage. NO_X emissions also contribute to acid rain, global warming, the formation of fine particles in the atmosphere, water quality deterioration, and visibility impairment.
- 137. Excess emissions of SO₂ increase the amount of acid rain and public exposure to unhealthy levels of SO₂. SO₂ reacts with other chemicals in the air to form tiny sulfate particles. Long term exposure to high levels of SO₂ gas and particles can cause respiratory illness, aggravate existing heart disease, and lead to premature death.
- 138. Excess emissions of PM₁₀ increase public exposure to unhealthy fine particulate matter. Fine particulate matter contributes to respiratory problems, lung damage, and premature deaths.

Cheryl L. Newton

Director

Air and Radiation Division